249612

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Scientific & Technical Information Center

EIC 2100
FAST & FOCUSED SEARCH

Today's Date 1/28/2008

This search cannot be completed unless you:
A. *Attach a copy of your EAST strategy.*
B. *Conduct an interview with your searcher.*

Name GREG BENGZON

AU/Org. 2144 Examiner # 80501

Bld.&Rm.# RAN 4A65 Phone 23944

Priority App. Filing Date 10/26/2008

Case/App. # 10/040012

Format for Search Results

EMAIL ___ PAPER X

If this is a Board of Appeals case, check here ☐

Synonyms peer-to-peer performance monitor for load, utilization indicator

Describe this invention in your own words each node has local value which is passed to neighbor nodes. Upon receiving a value from neighbor, ~~e~~ each node creates a composite value

Terms to avoid

Additional Comments

Please hand deliver completed form to your TIS.

STIC USE ONLY

Searcher Lucy Park Date Completed 1-28-08

Phone 28667 Sources Dialog

11/07

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1491	"709".clas. and ((aggregat$5 combin$5 interpret$5 correlat$5 co-relat$5 associat$5 translat$5 adjust$5 accumulat$5 cumulat$5 total$4 sum$4 add composite local$5) adj4 (value $5load metric measurement indicator time period unit second minute hour utilization)).clm. and ((individual peer local$5) adj5 (value $5load metric measurement indicator time period unit second minute hour utilization)).clm.	US-PGPUB; USPAT	OR	ON	2008/01/28 15:40
L2	487	l1 and ((aggregat$5 combin$5 interpret$5 correlat$5 co-relat$5 associat$5 translat$5 adjust$5 accumulat$5 cumulat$5 total$4 sum$4 add composite local$5 individual peer utilization $5load) near4 (sent send$5 transmit$5 propagat$5 broadcast$4)).clm.	US-PGPUB; USPAT	OR	ON	2008/01/28 15:42
L3	57	l2 and ((aggregat$5 combin$5 interpret$5 correlat$5 co-relat$5 associat$5 translat$5 adjust$5 accumulat$5 cumulat$5 total$4 sum$4 add composite local$5 individual peer utilization $5load) near4 (utilization $5load)).clm.	US-PGPUB; USPAT	OR	ON	2008/01/28 15:42

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S63	6348	(monitor$5 observ$5 gather$5 measur$5 evaluat$5 quantif$5 benchmark judg$5 meter$5 $5load volume latenc$4 quality qos speed threshold intelligen$5 metric$4 condition capacity performance) near5 (peer$5 adjacent related neighbor$5 $4server) and (@ad<"20001026" @rlad<"20001026") and "709". clas. and ((aggregat$5 combin$5 interpret$5 correlat$5 co-relat$5 associat$5 translat$5 adjust$5 accumulat$5 cumulat$5 total$4 sum$4 add composite local$5) near5 (value $5load metric measurement indicator time period unit second minute hour utilization))	US-PGPUB; USPAT	OR	ON	2008/01/28 15:38
S64	412	S63 and ((aggregat$5 combin$5 interpret$5 correlat$5 co-relat$5 associat$5 translat$5 adjust$5 accumulat$5 cumulat$5 total$4 sum$4 add composite local$5) near5 ($5load metric measurement indicator time period unit second minute hour utilization)).ab.	US-PGPUB; USPAT	OR	ON	2008/01/28 08:52
S65	164	S64 and ((aggregat$5 combin$5 interpret$5 correlat$5 co-relat$5 associat$5 translat$5 adjust$5 accumulat$5 cumulat$5 total$4 sum$4 add composite local$5) near5 ($5load utilization))	US-PGPUB; USPAT	OR	ON	2008/01/28 08:53

[File 2] **INSPEC** 1898-2008/Dec W5

[File 6] **NTIS** 1964-2008/Jan W4

[File 8] **Ei Compendex(R)** 1884-2008/Jan W3

[File 23] **CSA Technology Research Database** 1963-2008/Jan

[File 34] **SciSearch(R) Cited Ref Sci** 1990-2008/Jan W3

[File 35] **Dissertation Abs Online** 1861-2007/Oct

[File 65] **Inside Conferences** 1993-2008/Jan 25

[File 95] **TEME-Technology & Management** 1989-2008/Jan W2

[File 99] **Wilson Appl. Sci & Tech Abs** 1983-2007/Nov

[File 144] **Pascal** 1973-2008/Jan W2

[File 256] **TecInfoSource** 82-2008/Oct

[File 434] **SciSearch(R) Cited Ref Sci** 1974-1989/Dec

; d s

Set	Items	Postings	Description
S1	26601	138530	S PEER(2N)PEER OR P2P OR (FILE(2N)SHAR??? OR FILESHAR???)(2N)NETWORK? ?
S2	1735282	3582980	S LOAD? ? OR WORKLOAD? ? OR (RESOURCE? ? OR NETWORK? OR SERVER? ?)(3N)(UTILIS? OR UTILIZ? OR CAPACITY OR PERFORMANCE)
S3	9347391	14874112	S VALUE? ? OR INTEGER? ? OR NUMBER? ?
S4	901189	2089656	S S3(3N)(CALCULAT??? OR COMPUT??? OR DETERMIN? OR MEASUR??? OR MEASUREMENT? ? OR ASSIGN??? OR ESTIMAT??? OR FIND??? OR FIGUR???)
S5	85218	199504	S S3(3N)(PASS??? OR TRANSMIT? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER?)
S6	31136	70985	S (NEIGHBOR??? OR ADJACENT?? OR NEAR OR NEARBY OR NEXT OR BORDERING OR CONTIGUOUS?)(3N)(NODE? ? OR SERVER? ? OR DEVICE? ? OR APPARATUS OR APPTS OR MACHINE? ? OR COMPUTER? ?)
S7	149038	349084	S S3(3N)(ADD??? OR APPEND??? OR CONJOIN??? OR CONCATENAT??? OR COMBIN??? OR COMBINATION? ? OR COMPOSITE? OR AGGREGAT??? OR COMPOUND??? OR ACCUMULAT??? OR CONGLOMERAT???)
S8	3761	32622	S S1 AND (S2 OR PERFORMANCE(2N)MONITOR???)
S9	64	689	S S8 AND S4
S10	33	376	RD (unique items)
S11	0	0	S S10 AND S6

S12	1	6	S S10 NOT PY=2001:2008
S13	106	1183	S S8 AND S6
S14	60	701	RD (unique items)
S15	1	14	S S14 NOT PY=2001:2008
S16	207595	583403	S NETWORK? ?(5N)(LOAD? ? OR WORKLOAD? ? OR UTILIS? OR UTILIZ? OR CAPACITY OR PERFORMANCE)
S17	4134	21680	S S16 AND S4
S18	37	291	S S17 AND S6
S19	25	192	RD (unique items)
S20	7	52	S S19 NOT PY=2001:2008
S21	767	4181	S S16 AND S7
S22	63	513	S S21 AND S4
S23	63	513	S S22 NOT (S12 OR S15 OR S20)
S24	37	280	S S23 NOT PY=2001:2008
S25	20	155	RD (unique items)

15/5/1 (Item 1 from file: 2) Links

Fulltext available through: USPTO Full Text Retrieval Options STIC Full Text Retrieval Options

INSPEC

06082297 **INSPEC Abstract Number:** B9512-6210R-001, C9512-6130M-004

Title: Performance analysis of a peer-to-peer I/O architecture in video server environments

Author Huynh, K.D.; Khoshgoftaar, T.M.
Author Affiliation: IBM Corp., Boca Raton, FL, USA

Journal: Multimedia Tools and Applications vol.1, no.3 p. 217-44

Publication Date: Sept. 1995 **Country of Publication:** Netherlands
CODEN: MTAPFB **ISSN:** 1380-7501
U.S. Copyright Clearance Center Code: 1380-7501/95/$8.00

Language: English **Document Type:** Journal Paper (JP)
Treatment: Practical (P)

Abstract: In the personal computing (PC) and workstation environments, more and more I/O adapters are becoming complete functional subsystems that are intelligent enough to handle I/O operations on their own without much intervention from the host processor. The IBM Subsystem Control Block (SCB) architecture has been defined to enhance the potential of these intelligent adapters by defining services and conventions that deliver command information and data to and from the adapters. The SCB architecture has two operating modes. The Locate Mode represents the conventional, interrupt driven I/O protocol used in many current personal computers. The Move Mode embodies an advanced, **peer** to **peer** I/O protocol proposed for the **next** generation of personal **computers**. We discuss and present a performance analysis of the SCB architecture in typical video server environments. In particular, we study a video server capable of providing support for simultaneous MPEG-1 video streams to multiple clients on a 16 Mbps token ring network. We also consider the performance impact of a hypothetical 100 Mbps token ring technology on the video **server performance**. (19 Refs)

Subfile: B C

Descriptors: file servers; microcomputer applications; multimedia communication; multimedia computing; performance evaluation; protocols; token networks; video equipment

Identifiers: performance analysis; **peer-to-peer** I/O architecture; video server environments; personal computing; workstation environments; I/O adapters; functional subsystems; I/O operations; IBM Subsystem Control Block; SCB architecture; intelligent adapters; command information; operating modes; Locate Mode; interrupt driven I/O protocol; personal computers; Move Mode; **peer** to **peer** I/O protocol; simultaneous MPEG-1 video streams; token ring network; performance impact; video **server performance**

Class Codes: B6210R (Multimedia communications); B6220F (ISDN and multimedia terminal equipment); B6210L (Computer communications); B6430 (Television equipment, systems and applications); C6130M (Multimedia); C5620L (Local area networks); C5690 (Other data communication equipment and techniques); C5640 (Protocols); C5470 (Performance evaluation and testing); C5670 (Network performance)

20/5/1 (Item 1 from file: 2) Links

Fulltext available through: USPTO Full Text Retrieval Options STIC Full Text Retrieval Options

INSPEC

06810440 **INSPEC Abstract Number:** B9803-6150C-001

Title: Integrated dynamic distributed routing and admission control in ATM networks

Author Bolla, R.; Dalal'Ah, A.; Davoli, F.; Marchese, M.; Obaidat, M.S.
Author Affiliation: Dept. of Commun. Comput. & Syst. Sci., Genoa Univ., Italy

Journal: International Journal of Communication Systems vol.10, no.5 p. 215-25
Publisher: Wiley ,
Publication Date: Sept.-Oct. 1997 **Country of Publication:** UK
CODEN: IJCYEZ **ISSN:** 1074-5351
SICI: 1074-5351(199709/10)10:5L.215:IDDR;1-J
Material Identity Number: C303-97007
U.S. Copyright Clearance Center Code: 1074-5351/97/050215-10$17.50

Language: English **Document Type:** Journal Paper (JP)

Treatment: Practical (P); Theoretical (T)

Abstract: A node-by-node admission control and routing scheme for ATM networks is devised. The scheme is based on the subdivision of traffic into a number of classes, characterized by different **performance** requirements. At each **network** node, for all outgoing links, link capacity partitions are periodically assigned to the traffic classes, as the result of an optimization problem over a fixed time interval. Local access control rules **compute** the maximum **number** of connections of each class that a link can accept within the assigned capacity. Incoming call connection requests are forwarded in a hop-by-hop fashion. Each node traversed first checks the presence of resources needed to accept a new connection and guarantee all quality of service (QoS) requirements. This is done by using the local access control rule. Then, it chooses the **next node** along the path on the basis of a distributed routing strategy. This minimizes a cost function accounting for local instantaneous information, as well as for aggregate information that is passed periodically among **adjacent nodes**. Two routing strategies are introduced. In the first scheme, a new call is rejected if, at a certain node along the path, there are not enough resources to guarantee QoS requirements, and no recovery mechanism is implemented. In the second scheme, an alternative path is looked for after the first failure. Simulation results are presented which show a comparison between the two proposed routing strategies. Comparison is also made between the proposed scheme and the other approaches. (28 Refs)

Subfile: B

Descriptors: asynchronous transfer mode; channel capacity; minimisation; telecommunication congestion control; telecommunication network routing; telecommunication traffic

Identifiers: node-by-node admission control; dynamic distributed routing; ATM networks; traffic subdivision; performance requirements; link capacity partitions; optimization problem; access control rules; call connection requests; quality of service requirements; QoS requirements; cost function minimization

Class Codes: B6150C (Communication switching); B6150P (Communication network design and planning); B0260 (Optimisation techniques)

20/5/4 (Item 1 from file: 35) **Links**
Dissertation Abs Online

01099002 ORDER NO: AAD13-38061
A LOAD-BALANCING SCHEDULING ALGORITHM FOR DISTRIBUTED SYSTEMS

Author: HIGGINS, CHARLES A.
Degree: M.S.
Year: 1989
Corporate Source/Institution: STATE UNIVERSITY OF NEW YORK INSTITUTE OF TECHNOLOGY AT UTICA/ROME (1026)
Adviser: SAM SENGUPTA
Source: Volume 28/02 of MASTERS ABSTRACTS. of Dissertations Abstracts International.
PAGE 294 . 168 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

This thesis proposes a simple scheduling algorithm for load balancing in a distributed system. Task migration occurs when the number of processes in a node exceeds a dynamic estimate based on the node's load and average process count. Migrations are based on a probability measure determined by the amount the node exceeds its **estimated** optimal **number** of processes. Tasks migrate to **neighboring nodes** chosen probabilistically from a distribution vector maintained by comparing neighbors' load values to the average of the neighborhood.

Simulations of various **networks** at differing **load** levels show the algorithm performs well over a wide range of **loads** and with varying **network** communication speeds. Wait times reduce by a factor of 2 to 3 compared to networks with no migration. Using M/M/K queueing simulations to obtain the lower bound on wait time demonstrates that the algorithm achieves as much as 80% of the possible wait time reduction.

20/5/5 (Item 1 from file: 95) Links
TEME-Technology & Management

01157585 I97111941300
Multiple node-disjoint path protocol for virtual paths in ATM networks

Ishida, K
Fac. of Inf. Sci., Hiroshima City Univ., Japan
Proceedings of The Joint Workshop on Parallel and Distributed Real-Time Systems. Fifth International Workshop on Parallel and Distributed Real-Time Systems (WPDRTS) and the Third Workshop on Object-Oriented Real-Time Systems (OORTS) (Cat. No.97TB100157), 1-3 April 1997, Geneva, Switzerland , 1997
Document type: Conference paper **Language:** English
Record type: Abstract
ISBN: 0-8186-8096-2

Abstract:
This paper presents a routing protocol for finding multiple node-disjoint paths between two nodes in a computer network. **Finding** the maximal **number** of node-disjoint paths is one of the most important themes in ATM networks to increase the level of network reliability. In ATM networks, the virtual path (VP) concept is appropriate to network control for failure restoration (path restoration). In the VP concept, the path restoration is realized rapidly by rerouting failed paths to their backup node-disjoint paths. Some multiple path protocols have been proposed to enhance reliability or throughput. However, such multiple paths are shared with each other in some nodes or channels. Only node-disjoint path protocols enable the most reliable real-time routing in ATM networks. In the proposed protocol, each node in the network has the same procedure, which is driven by local information with respect to the network topology such as an **adjacent node** on a spanning tree in the network. Therefore, the execution of the protocol can continue after changes of the network topology.

Descriptors: COMPUTER **NETWORKS**; **PERFORMANCE** EVALUATION; **NETWORK** ROUTING; TREE STRUCTURE; THROUGHPUT; NETWORK TOPOLOGY; ASYNCHRONOUS TRANSFER MODE; REAL TIME SYSTEM; ASYNCHRONOUS TRANSFER MODE NETWORKS
Identifiers: NETZWERKZUVERLAESSIGKEIT; LEITWEGPROTOKOLL; NETZWERKREGELUNG; Rechnernetz; Leistungsbewertung

20/5/6 (Item 2 from file: 95) Links

Fulltext available through: USPTO Full Text Retrieval Options STIC Full Text Retrieval Options

TEME-Technology & Management

01074434 I97023394353

Reliable unicasting in faulty hypercubes using safety levels

(Zuverlaessige direkte Kommunikation in fehlerhaften Hypercubes mit Hilfe von Sicherheitsstufen)

Jie Wu

Dept. of Comput. Sci. & Eng., Florida Atlantic Univ., Boca Raton, FL, USA

IEEE Transactions on Computers, v46, n2, pp241-247 , 1997

Document type: journal article **Language:** English

Record type: Abstract

ISSN: 0018-9340

Abstract:

We propose a unicasting algorithm for faulty hypercubes (including disconnected hypercubes) using the safety level concept. A faulty hypercube is a hypercube with faulty nodes and unicasting is a one-to-one communication between two nodes in the hypercube. Each node is associated with a safety level which is an approximated **measure** of the **number** and distribution of faulty nodes in the neighborhood. The safety level of each node in an n-dimensional hypercube (or n-cube) can be easily calculated through n-1 rounds of information exchange among **neighboring nodes**. Optimal unicasting between two nodes is guaranteed if the safety level of the source node is no less than the Hamming distance between the source and the destination. The proposed unicasting algorithm can also be used in disconnected hypercubes, where nodes in a hypercube are disjointed into two or more parts. The feasibility of an optimal or suboptimal unicasting can be easily determined at the source node by comparing its safety level, its neighbors' safety levels, and the Hamming distance between the source and the destination. The proposed scheme is the first attempt to address the unicasting problem in disconnected hypercubes. The safety level concept is also extended to be used in hypercubes with both faulty nodes and links and in generalized hypercubes.

Descriptors: ERROR RESILIENT SCHEME; REDUNDANCY; RELIABILITY; PARALLEL PROCESSING; MASSIVELY PARALLEL MACHINES; PARALLEL PROCESSORS; PARALLEL PROGRAMMING; COMPUTER ARCHITECTURE; NETWORK TOPOLOGY; COMMUNICATION SYSTEMS; DATA COMMUNICATION; DATA EXCHANGE; ALGORITHM; **PERFORMANCE** ANALYSIS; **PERFORMANCE** EVALUATION; HYPERCUBE **NETWORKS**

Identifiers: RELIABLE UNICASTING; FAULTY HYPERCUBES; SAFETY LEVELS; FAULTY NODES; ONE TO ONE COMMUNICATION; N CUBE; HAMMING DISTANCE; HYPERCUBE PARALLELRECHNER; SICHERHEITSSTUFEN; Hypercube-Parallelrechner; Sicherheitsstufe; Zuverlaessigkeit

25/5/2 (Item 2 from file: 2) Links

Fulltext available through: USPTO Full Text Retrieval Options STIC Full Text Retrieval Options

INSPEC

06529209 **INSPEC Abstract Number:** C9705-5470-002

Title: Performance bounds for distributed systems with workload variabilities and uncertainties

Author Luthi, J.; Majumdar, S.; Kotsis, G.; Haring, G.
Author Affiliation: Inst. fur Angewandte Inf., Wien Univ., Austria

Journal: Parallel Computing vol.22, no.13 p. 1789-806
Publisher: Elsevier ,
Publication Date: 28 Feb. 1997 **Country of Publication:** Netherlands
CODEN: PACOEJ **ISSN:** 0167-8191
SICI: 0167-8191(19970228)22:13L.1789:PBDS;1-2
Material Identity Number: F777-97004
U.S. Copyright Clearance Center Code: 0167-8191/97/$17.00
Document Number: S0167-8191(96)00077-4
Language: English **Document Type:** Journal Paper (JP)
Treatment: Practical (P)

Abstract: Bounding techniques for queuing **network** models used to analyze the **performance** of parallel and distributed **computer** systems accept single **values** as model inputs. Uncertainties or variabilities in service demands may exist in many types of systems. Using models with a single **aggregate** mean **value** for each parameter for such systems can lead to inaccurate or even incorrect results. This paper proposes to use histograms for characterizing model parameters that are associated with uncertainty and/or variability. The adaptation of the well-known asymptotic bounds as well as balanced job bounds for single class queuing networks to histogram parameters is presented in the paper. (20 Refs)

Subfile: C

Descriptors: client-server systems; parallel processing; performance evaluation; queueing theory

Identifiers: performance bounds; distributed systems; workload variabilities; uncertainties; queuing network models; distributed computer systems; parallel computer systems; single **aggregate** mean **value**; model parameters; asymptotic bounds; balanced job bounds

Class Codes: C5470 (Performance evaluation and testing); C5440 (Multiprocessing systems); C1140C (Queueing theory)

25/5/13 (Item 2 from file: 8) **Links**
Ei Compendex(R)

07590859 **E.I. No:** EIP97013485279
Title: Full utilization, fairness and bounded access delay on high speed bus networks

Author: Chiu, Angela L.; Gallager, Robert G.
Corporate Source: Massachusetts Inst of Technology, Cambridge, MA, USA
Conference Title: Proceedings of the 1996 International Conference on Network Protocols
Conference Location: Columbus, OH, USA **Conference Date:** 19961029-19961101
Sponsor: IEEE
E.I. Conference No.: 45770
Source: International Conference on Network Protocols 1996. IEEE, Los Alamitos, CA, USA,96TB100070. p 154-161
Publication Year: 1996
CODEN: 85QDAI
Language: English
Document Type: CA; (Conference Article) **Treatment:** G; (General Review); T; (Theoretical)
Journal Announcement: 9702W4
Abstract: The purpose of this paper is to understand the relationship between utilization, fairness and access delay in high speed slotted bus networks. We illustrate this relationship by means of a protocol called FUFA (fully utilized and fair). We define full utilization, and fairness precisely, and show that both are achieved together in the FUFA protocol. In addition, the protocol provides bounded access delay that is linear in the round trip propagation delay, and at most a constant away from its minimum possible value for any bus protocol that is both fully utilized and fair. The main idea is that each station takes account of the idle slots propagated previously to interpret the information from downstream (i.e., **estimated aggregate number** of data segments in queue downstream and **estimated number** of active downstream stations). This allows the active downstream stations to be served in a round robin fashion according to the updated information. (Author abstract)
Descriptors: *Network protocols; Data processing; Computer networks; Algorithms
Identifiers: Fully **utilized** and fair (FUFA) **network** protocol; Bounded access delay; Propagation delay; Dual bus networks
Classification Codes:
723.2 (Data Processing)
723 (Computer Software); 718 (Telephone & Line Communications)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

25/5/19 (Item 4 from file: 35) **Links**
Dissertation Abs Online

884598 ORDER NO: AAD85-12899
CONFIGURING LOCAL AREA NETWORK-BASED DISTRIBUTED SYSTEMS (QUEUEING MODELS, WORKLOAD CHARACTERIZATION, PERFORMANCE EVALUATION)

Author: LEE, TZONG-YU PAUL
Degree: PH.D.
Year: 1984
Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, BERKELEY (0028)
Source: Volume 4604B of Dissertations Abstracts International.
PAGE 1242 . 128 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

This dissertation studies the problem of designing the configuration of local area **network**-based distributed systems by a **performance** modeling approach. The study concentrates primarily on the interactive transaction-oriented computer systems connected by an Ethernet-like network. Major transaction types are chosen to represent the workload; each type is characterized by the demands on various computing resources. A two-step methodology is described that produces the initial configuration; this configuration is the one to which more detailed queueing network models are applied. Based on the queueing model results, the methodology then iterates to refine the configuration of the distributed system.

Various transaction types are first assigned to host systems to balance CPU utilizations. We then distribute the shared files among host systems to minimize total remote file accesses. Queueing network models for our distributed systems are constructed from a set of submodels of the host systems, of the local area network, and of the file servers if any. Model parameters are derived from our workload data, measured in an interactive transaction-oriented business system. Two examples are provided to show how the configuration of a local area network-based distributed system can be designed by using our workload data.

Attempts are next made to capture in our queueing network models the difference in resource demands during the preparation phase and the execution phase of a typical transaction. As a result, we introduce the special class of phase-free queueing network. It is shown that a general product-form queueing network can be reduced to an equivalent phase-free product-form queueing network. It is also shown that the per-class throughputs, mean queueing time, and mean queue length in the original network can be **calculated** from the **values** of the **aggregate** indices of the phase-free network.

Lastly, a special class of local area network-based distributed systems, that of the workstation-based systems, is examined in some detail. Workload clustering is proposed as a method for reducing the number of chains in the model to make it more tractable mathematically. File server design issues are investigated, and design guidelines are recommended based on workload data and performance goals.

25/5/19 (Item 4 from file: 35) **Links**
Dissertation Abs Online

884598 ORDER NO: AAD85-12899

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Author: LEE, TZONG-YU PAUL
Degree: PH.D.
Year: 1984
Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, BERKELEY (0028)
Source: Volume 4604B of Dissertations Abstracts International.
PAGE 1242 . 128 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

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[File 347] **JAPIO** Dec 1976-2007/Sep(Updated 080116)

[File 350] **Derwent WPIX** 1963-2008/UD=200806

**File 350: English-language translations of Chinese Utility Model registrations are available starting with update 200769.*

; d s
Set Items Postings Description
S1 4635 50497 S PEER(2N)PEER OR P2P OR (FILE(2N)SHAR??? OR FILESHAR???)(2N)NETWORK? ?
S2 954128 3482530 S LOAD? ? OR WORKLOAD? ? OR (RESOURCE? ? OR NETWORK? OR SERVER? ?)(3N)(UTILIS? OR UTILIZ? OR CAPACITY OR PERFORMANCE)
S3 3553920 14413136 S VALUE? ? OR INTEGER? ? OR NUMBER? ?
S4 435626 2721274 S S3(3N)(CALCULAT??? OR COMPUT??? OR DETERMIN? OR MEASUR??? OR MEASUREMENT? ? OR ASSIGN??? OR ESTIMAT??? OR FIND??? OR FIGUR???)
S5 116995 493510 S S3(3N)(PASS??? OR TRANSMIT? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER?)
S6 65398 282804 S (NEIGHBOR??? OR ADJACENT?? OR NEAR OR NEARBY OR NEXT OR BORDERING OR CONTIGUOUS?)(3N)(NODE? ? OR SERVER? ? OR DEVICE? ? OR APPARATUS OR APPTS OR MACHINE? ? OR COMPUTER? ?)
S7 111145 497810 S S3(3N)(ADD??? OR APPEND??? OR CONJOIN??? OR CONCATENAT??? OR COMBIN??? OR COMBINATION? ? OR COMPOSITE? OR AGGREGAT??? OR COMPOUND??? OR ACCUMULAT??? OR CONGLOMERAT???)
S8 0 0 S S1 AND S2 AND S4 AND S5(7N)S6(7N)S7
S9 0 0 S S1 AND S2 AND S4 AND S5 AND S6 AND S7
S10 33 875 S S1 AND S2 AND S4
S11 10 424 S S10 AND S5:S7
S12 2 86 S S11 NOT AD=20001027:20080128/PR
S13 7 191 S S2(7N)S4 AND S1
S14 7 191 S S13 NOT S12
S15 0 0 S S14 NOT AD=20001027:20080128/PR
S16 49630 288454 S S2(3N)(CALCULAT??? OR COMPUT??? OR DETERMIN? OR MEASUR??? OR MEASUREMENT? ? OR ASSIGN??? OR ESTIMAT??? OR FIND??? OR FIGUR???)
S17 307 4353 S S16 AND S6
S18 1 14 S S17 AND S1
S19 19 659 S S1 AND S2 AND S6
S20 18 640 S S19 NOT (S12 OR S14 OR S18)
S21 2 57 S S20 NOT AD=20001027:20080128/PR
S22 573 9212 S S1 AND (S2 OR PERFORMANCE(2N)MONITOR???)
S23 34 904 S S22 AND S4
S24 25 538 S S23 NOT (S12 OR S14 OR S18 OR S21)
S25 6 131 S S24 NOT AD=20001027:20080128/PR
S26 19 664 S S22 AND S6
S27 14 513 S S26 NOT (S12 OR S14 OR S18 OR S21 OR S24)
S28 0 0 S S27 NOT AD=20001027:20080128/PR

21/5/2 (Item 2 from file: 350) Links
Fulltext available through: Order File History
Derwent WPIX

0010455832 *Drawing available*
WPI Acc no: 2001-055326/200107
XRPX Acc No: N2001-042831
Load balancing system for peer-to-peer architecture internet servers, has policy manager to monitor performance of servers and connects server and user based on IP address of user obtained using DNS service
Patent Assignee: ALTEON WEB SYSTEMS INC (ALTE-N); ALTEON WEBSYSTEMS INC (ALTE-N); ARTEON WEB SYSTEMS INC (ALTE-N)
Inventor: DAVID; LOGAN D B; SATHAYE S; SHIRISSHU S

Patent Family (4 patents, 4 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2000315200	A	20001114	JP 1999309760	A	19990924	200107	B
TW 447201	A	20010721	TW 1999116547	A	19991129	200219	E
US 6578066	B1	20030610	US 1999398248	A	19990917	200340	E
IL 132016	A	20031010	IL 132016	A	19990923	200402	E

Priority Applications (no., kind, date): US 1998101656 P 19980924; US 1999398248 A 19990917

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 2000315200	A	JA	39	3		
TW 447201	A	ZH				
IL 132016	A	EN				

Alerting Abstract JP A
NOVELTY - A policy manager monitors response performance of **peer-to- peer** architecture servers located at different areas and their access possibility. The managers connect the network user to specific server at location different to that of user, based on virtual IP address of user obtained by DNS service, when **load** of server in the same location as that of user, is larger.
USE - For **peer-to-peer** architecture internet servers used for business application.
ADVANTAGE - **Load** is distributed equally on the net servers, reliably.

25/5/2 (Item 2 from file: 350) Links
Fulltext available through: Order File History
Derwent WPIX

0009284716 *Drawing available*
WPI Acc no: 1999-214327/199918
Related WPI Acc No: 1997-280572; 1999-095167
XRPX Acc No: N1999-157730
Peer-to-peer computer network system for multimedia storage and presentation system - has local management unit which controls allocation of interconnecting resources to prevent overload of data buffer during display of video multimedia clips
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: KINDELL C N; MILSTED K L; VOGT M P; WAEFLER S E; YODER B E

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5884028	A	19990316	US 1994283030	A	19940729	199918	B

Priority Applications (no., kind, date): US 1994283030 A 19940729

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 5884028	A	EN	21	6	

Alerting Abstract US A
NOVELTY - Computers (11,13,15) which acts as both client and server, are connected to a network (16) using interconnecting resources. A local management unit controls allocation of interconnecting resources to prevent overload of data buffer during display of video multimedia clips. DETAILED DESCRIPTION - Resources comprises data buffer for storing digital information in video multimedia data clips. An INDEPENDENT CLAIM is included for video clip accessing method.
For storing and displaying video multimedia clips in multimedia storage and presentation system.
Provides video clips to associated viewing station in response to viewer request. Enhances system operation efficiency while assuring each video clip is displayed without interruption. DESCRIPTION OF DRAWING(S) - The figure shows **peer-to-peer** computer network system. (11,13,15) Computers; (16) Network.

[File 348] **EUROPEAN PATENTS** 1978-2007/ 200804

**File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.*

[File 349] **PCT FULLTEXT** 1979-2008/UB=20080117UT=20080110

**File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.*

; d s

Set	Items	Postings	Description
S1	10176	138884	S PEER(2N)PEER OR P2P OR (FILE(2N)SHAR??? OR FILESHAR???)(2N)NETWORK? ?
S2	421658	3617924	S LOAD? ? OR WORKLOAD? ? OR (RESOURCE? ? OR NETWORK? OR SERVER? ?)(3N)(UTILIS? OR UTILIZ? OR CAPACITY OR PERFORMANCE)
S3	1613624	31663428	S VALUE? ? OR INTEGER? ? OR NUMBER? ?
S4	471796	4982786	S S3(3N)(CALCULAT??? OR COMPUT??? OR DETERMIN? OR MEASUR??? OR MEASUREMENT? ? OR ASSIGN??? OR ESTIMAT??? OR FIND??? OR FIGUR???)
S5	118790	780092	S S3(3N)(PASS??? OR TRANSMIT? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER?)
S6	89020	505354	S (NEIGHBOR??? OR ADJACENT?? OR NEAR OR NEARBY OR NEXT OR BORDERING OR CONTIGUOUS?)(3N)(NODE? ? OR SERVER? ? OR DEVICE? ? OR APPARATUS OR APPTS OR MACHINE? ? OR COMPUTER? ?)
S7	175326	1082104	S S3(3N)(ADD??? OR APPEND??? OR CONJOIN??? OR CONCATENAT??? OR COMBIN??? OR COMBINATION? ? OR COMPOSITE? OR AGGREGAT??? OR COMPOUND??? OR ACCUMULAT??? OR CONGLOMERAT???)
S8	38	539	S S1(20N)S2(100N)S4
S9	10	139	S S8 NOT AD=20001027:20080128/PR
S10	1003	7272	S S1(50N)(S2 OR PERFORMANCE(2N)MONITOR???)
S11	20	183	S S10(100N)S5
S12	31	222	S S10(100N)S6
S13	50	401	S S11:S12 NOT S9
S14	6	48	S S13 NOT AD=20001027:20080128/PR

full text
patents

[** bad date? fyi **]

14/3K/5 (Item 2 from file: 349) Links
Fulltext available through: Order File History
PCT FULLTEXT

00799954
SYSTEM AND METHOD FOR CONVEYING STREAMING DATA
SYSTEME ET PROCEDE D'ACHEMINEMENT DE DONNEES EN CONTINU

Patent Applicant/Patent Assignee:

- **WEEMA TECHNOLOGIES INC**; 58 Charles Street, Suite 302, Cambridge, MA 02141-2128 US; US(Residence); US(Nationality)

Legal Representative:

- **MORIARTY Gordon R(et al)(agent)**
  Weingarten, Schurgin, Gagnebin & Hayes, LLP, Ten Post Office Square, Boston, MA 02109; US;

	Country	Number	Kind	Date
Patent	WO	200133542	A1	20010510
Application	WO	2000US41732		20001101
Priorities	US	99163153		19991102

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Publication Language: English
Filing Language: English
Fulltext word count: 4706

Detailed Description:

...the capacity
to recognize the geographic location of network nodes in order to more efficiently **utilize network** bandwidth in handling traffic to and from nodes. For instance, a distributed database may contain... ...in a
dense network such as described above for more efficiently delivering cached data.

True **peer-to-peer** networks have not been employed

for distributing streaming data. Distributed databases such as NAPSTER (Napster, Inc.) **utilize** a **network** of yet require some form of centralized intelligence for maintaining a database of node addresses... ...form of neighbor awareness to the extent that one server may have address tables of **neighboring** networked **servers**.

Yet such awareness has not included bandwidth utilization information for **neighboring servers** or the distributed intelligence for requesting additional resources or for redirecting data flow based on ...control software program or module which is responsible for the periodic exchange of network and **server** state information with **neighboring servers**. Each **server** employs a substantially identical control module such that a true peer-to-peer network is...as compared to the physical location of the respective server. The flexibility of such a **peer-to peer** network control module enables the **utilization** of plural **servers** to distribute a single data stream in the event one server would have inadequate bandwidth... ...the respective server in order to define contingency plans in the event one or more **neighboring servers** goes off-line. Such an occurrence may be the result of hardware failure or malicious...